

### CLAIMS

1. A plasma generation device comprising a first electrode, a second electrode, and a pulse power supply for generating a pulse voltage, wherein plasma is generated by  
5 an electric discharge induced between said first electrode and said second electrode by applying a predetermined pulse voltage from said pulse power supply to a point between said first electrode and said second electrode.

2. A plasma generation device comprising a first  
10 electrode, a second electrode, and a high frequency power supply for generating a high frequency voltage, wherein plasma is generated by an electric discharge induced by applying a predetermined high frequency voltage from said high frequency power supply to a point between said first  
15 electrode and said second electrode.

3. The plasma generation device according to claim 1, wherein said first electrode is an electrode bar and said second electrode is a cylindrical electrode, and said electrode bar is disposed at the center of said cylindrical  
20 electrode, forming coaxial cylindrical electrodes.

4. The plasma generation device according to claim 1, further comprising a third electrode plate for directing said plasma to a desired jetting direction.

5. A multiple-type plasma generation apparatus  
25 comprising a plurality of plasma generation devices according to claim 3.

6. The plasma generation device according to claim 1, wherein said first electrode is an electrode bar and said second electrode is an electrode plate, wherein one end of  
30 said electrode bar is disposed facing a surface of said

electrode plate, with a predetermined distance therebetween.

7. The plasma generation device according to claim 6, comprising a plurality of said electrode bars.

8. The plasma generation device according to claim 7,  
5 wherein said plurality of electrode bars are disposed apart with a predetermined distance therebetween.

9. The plasma generation device according to claim 7,  
wherein said plurality of electrode bars are disposed such  
that a central electrode bar is closer to said electrode  
10 plate than the other electrode bars.

10. The plasma generation device according to claim 7,  
wherein said plurality of electrode bars are disposed such  
that none of the electrode bars are disposed at the center.

11. The plasma generation device according to claim 1,  
15 said first electrode being made of iridium alloy.

12. The plasma generation device according to claim 1,  
said first electrode being made of tungsten.